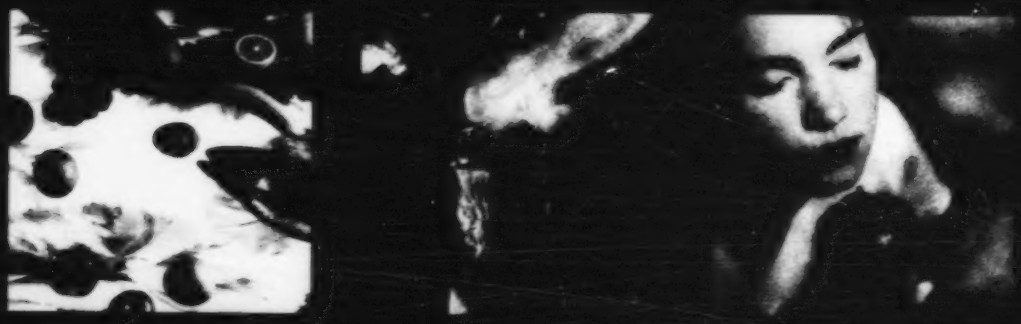

It's time to take another look

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The Alberta Cancer Board represents a province-wide team of physicians, nurses, research scientists, technicians, administrators and support staff working to prevent, diagnose, treat and understand cancer.

As we enter the last years of the century it is becoming even more apparent that prevention is as much a key to reducing the impact of cancer as treatment. This report explores the concept and process of prevention, particularly as it relates to lifestyle choices. These are choices open to each and every one of us as individuals. As such they will play a crucial role in the consequences of cancer in the years ahead.

Alberta Cancer Board

Cross Cancer Institute, Edmonton

- **Central Alberta Cancer Centre Red Deer**
- **Grande Prairie Cancer Centre**
- **Peace River Clinic**
- **Fort McMurray Clinic**

Tom Baker Cancer Centre, Calgary

- **Lethbridge Cancer Clinic**
- **Medicine Hat Cancer Clinic**

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Chairman's Letter

The mandate of the Alberta Cancer Board is to provide comprehensive cancer care for Albertans. Whether it is public education activities undertaken at our Associate Clinics, a treatment program at the Tom Baker Cancer Centre in Calgary or a research fellowship at the Cross Cancer Institute in Edmonton, the work of the Board is made possible by the efforts and dedication of hundreds of health care professionals and volunteers.

As Chairman of the Alberta Cancer Board I am privileged to present the 1989-90 Annual Report. This year our focus is on the many choices we can make as individuals that will lessen our exposure to the risk factors associated with cancer. As individuals however, we must first understand what those risk factors are and what choices can be made. The information in this Annual Report represents guidelines on the subject of prevention. I believe that these guidelines are both valuable and timely and I urge all who read this document to take them to heart.

Until that time comes when cancer is no longer a threat, the work of the Alberta Cancer Board must continue. The success we achieve with our patients will be because of the partnership of staff, volunteers, other agencies providing cancer services and the government of Alberta.

Arthur D. Davis
Chairman
Alberta Cancer Board

President's Report

It is fitting that in a year which marked the second consecutive deficit financing for the Alberta Cancer Board, that our 1989/90 Annual Report turns its attention to Prevention. With neither a forseeable increase in funding nor any slowdown in demand for service, we must clearly maximize our efforts in preventing the occurrence of cancer. This report outlines our continuing commitment to preventive services and highlights some of the Alberta Cancer Board's priorities in this area.

Prevention is but one of the four primary programs the Board offers to the public. The others are patient services, public education and research. In the area of research, March 1990 saw the culmination of Project Alpha. This very successful campaign in southern Alberta raised the funds to open the Southern Alberta Cancer Research Centre.

The Centre occupies an entire floor in the Heritage Medical Research Building located on the Foothills Site in Calgary and is home to scientists collaborating in research with their colleagues at the University of Calgary. The Board is very appreciative of the support shown by the oil and gas industry, farming community, business people and population- at-large for this important undertaking.

Another exciting new venture was the joint project between Vencap Equities Alberta Ltd. and the Alberta Cancer Board to identify and clone new genetic markers. These markers will be incorporated into a commercial kit capable of predicting risk of early relapse in women with node-negative breast cancer.

The Board initiated discussions with Government, the University of Alberta and the University of Calgary to establish a Department of Oncology in both centres. These departments would strengthen the academic profile of the various programs related to cancer medicine and the joint planning of future programs. They would also provide greater visibility for the achievements of oncology programs.

All facilities of the Board continued to provide world class treatment for their patients despite the reduction in staff and supplies caused by reduced funding. The dedication and hard work displayed under difficult circumstances by all employees are appreciated by everyone involved – the patients, administration, and Board members.

The Board is committed to implementing a comprehensive prevention program. This report focuses on the issue of prevention and its importance to the overall picture of cancer care and treatment. I commend the report and the activities it outlines to you for consideration.

Dr Jean-Michel Turc
President
Alberta Cancer Board

Cross Cancer Institute

The Cross Cancer Institute, located in Edmonton, is the comprehensive cancer centre of northern Alberta. The Institute's mandate includes the provision of cancer-related services to the people of northern Alberta, the conduct of research into the cancer problem and participation in the education of health care professionals, patients and the public. The Institute is assisted in its clinical activities by two associate cancer centres (Red Deer's Central Alberta Cancer Centre and the Grande Prairie Cancer Centre) and by the Peace River and Fort McMurray Clinics.

This year the Alberta Cancer Board's report highlights the Board's activities in prevention of cancer. This is a timely consideration indeed. In Alberta, as in Canada, we are experiencing a remarkable increase in the annual number of persons diagnosed with cancer. While progress continues in the treatment of cancer, it is unfortunately true that many patients diagnosed today still cannot be cured. Furthermore, treatment costs are escalating while the overall resources for health care delivery are under strain. These factors underline the desirability of developing effective preventive measures.

The clinical responsibilities of the Cross Cancer Institute lie predominantly in the treatment of patients already diagnosed with cancer. The Institute also collaborates closely with the Alberta Cancer Board's Division of Epidemiology and Preventive Oncology in the development of prevention programs. This year sees us ready to help implement these programs in northern Alberta. Examples of the Institute's past and present contributions to prevention and early detection of cancer include the organization in northern Alberta of colposcopy clinics for the early detection of cancer of the cervix, the provision of mammography and needle localization procedures for breast cancer diagnosis and the conduct of clinical research into the early detection of colon cancers.

In the laboratory, our research programs include investigations to clarify the genetic factors influencing an individual's susceptibility to cancer. There is also research on the mechanisms underlying the causation and development of malignant tumours. We hope that this work will provide important clues for the development of novel preventive measures.

During the 1989/90 year, the Alberta Cancer Board continued with plans for a major expansion of the Cross Cancer Institute. Detailed design of the expansion was close to completion at the end of the year. Construction of the expansion is scheduled to start early in the 1990/91 year, with a target completion date of July 1992. This expansion will result in an approximate doubling of the size of the Institute, providing additional space for clinical activities and laboratory research. Following the construction there will be extensive renovation of the existing building, with completion anticipated in 1994. This project will allow the Institute to address the needs of the increasing numbers of cancer patients, while maintaining a position at the forefront of advances in cancer medicine.

Dr. Tony Fields
Director
Cross Cancer Institute

Tom Baker Cancer Centre

The Tom Baker Cancer Centre in Calgary provides comprehensive cancer care for southern Alberta. The Centre has two Associate Clinics in Lethbridge and Medicine Hat.

As a tertiary care referral centre the Tom Baker Cancer Centre provides specialized cancer diagnosis and treatment to patients from southern Alberta. It is integrated closely with the Foothills Provincial General Hospital for the provision of diagnostic and inpatient services to avoid duplication. The pediatric oncology program is a joint undertaking of the Cancer Centre with the Alberta Children's Hospital. The Tom Baker Cancer Centre is formally affiliated with the University of Calgary and through the Southern Alberta Cancer Research Centre within its Faculty of Medicine, carries out internationally acclaimed laboratory and clinical research programs. It participates in resident and undergraduate training programs with the University, including graduate students in the medical and natural sciences. The Centre has its own School of Radiation Oncology Technology and assists in the training of students of nursing, psychology and other health care disciplines.

The Alberta Cancer Board Report this year focuses on prevention. The Tom Baker Cancer Centre liaises closely with the Board's Division of Epidemiology and Preventive Oncology, whose major prevention activities, such as the Steve Fonyo Program, are located on the Foothills site in Calgary close to the Centre.

During the past year major progress has occurred in the development of the Southern Alberta Cancer Program. The bone marrow transplant program has expanded and the pediatric oncology program has relocated to the Alberta Children's Hospital. Planning for expanded cancer facilities has begun to meet the more than 50% expected increase in workload through the millennium. The new Cancer Research Centre has opened and plans for a Department of Oncology within the Faculty of Medicine are underway.

I wish to express my thanks to the provincial administration of the Alberta Cancer Board and to the Alberta Cancer Board itself for their strong continuing support of the Southern Alberta Cancer Program. The Tom Baker Centre abbreviates to TBCC. For our staff and patients these letters continue to mean "The Best Cancer Care." The excellence and dedication of our staff make this possible.

Dr. L. Martin Jerry
Director
Tom Baker Cancer Centre

Epidemiology and Prev

This year's annual report of the Alberta Can cancer, a subject which is part of the man Preventive Oncology. We are committed to the disease is in preventing it." This fiscal year (198 years, of the Steve Fonyo Cancer Prevention Pro Unit (located in Calgary) of the Division of Epid been able to lay the foundations of a highly rega which has received international recognition. At implement prevention programs throughout the

The 1989/90 fiscal year was an exciting one f

Department of Informa Board, a new data-entr registry was developed and a monograph on 2 mortality was publishe terms of morbidity and Alberta population has years. This can only str of this disease.

The cancer registry the support of cancer s planning and research. of the registry was initi more efficient. In 1989 with cancer. The care of these patients requires we are committed.

Research efforts are yielding useful results fr and from investigations on various cancer types continue to focus on identifying factors that are tumours. To successfully meet the challenges of efforts must be channelled to the translation of that appears promising is "chemoprevention." A A) was used to try to prevent skin cancer in Albe done under the auspices of the Alberta Cancer E provide important results.

Through the use of research and resources s Epidemiology and Preventive Oncology will co of all Albertans.

Dr. J. Berkel
Director
Division of Epidemiology and Preventive Oncol

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creased considerably in the last 25
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ntinues to be an essential element in
vices: a vital resource for evaluation,
this fiscal year a major reorganization
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" Increased communication and joint strategies with other health care organizations in Alberta enhances the return on investment and will assist in spreading a coordinated message to Albertans."
Dr. Jean-Michel Turc. President. Alberta Cancer Board.

Fashion: Changes In Attitude

In the seventeenth and eighteenth centuries ladies of wealth would shun the sun and even coat their faces with white makeup in order to preserve or present a pale complexion. Such a colour was considered both beautiful and fashionable, the latter because it indicated the lady had no need to toil in the sun. Today, because of the growing concern over skin cancer, it is becoming fashionable once again to decrease exposure to the sun. Fashion is making itself felt in other areas as well. It has become fashionable to join a fitness club and work out

It's Time To Take Charge

While finding a cure for cancer will require time there are steps we can take immediately to reduce the impact of cancer on our lives. During the 1960's and 1970's we learned that the development of some cancers can be prevented and that other types of cancer can be detected in its early stages, consequently improving the chances of a cure. Preventing cancer is a critical responsibility that must be shared by everyone. It should become our collective focus for the 1990's.

more often and that's changing people's attitude about their health and lifestyle. The result? More exercise, more concern about food choices and a positive step forward in combatting the risk not only of cancer but also of heart disease.
Smoking is a prime example of a change in attitude given increased awareness by the demands of fashion. What used to be viewed as a fashionable activity – the choice of movie stars and sports heroes – is now seen as unhealthy and socially questionable.

Effective prevention depends on awareness and action – putting into practice the steps that we already know will reduce our risk. Part of that involves changes in attitudes about the risk factors associated with cancer. For example attitudes towards smoking, one of the major risk factors for cancer, have changed considerably in the last ten years. This is especially true outside the home. Our work places, where we spend seven, eight or even more hours a day, are becoming smoke-free, improving the health of non-smokers as their exposure to second-hand smoke is reduced. Although, unfortunately, the number of young women smokers is increasing, the change in attitude has generally helped to reduce the number of people smoking, which will lower the impact of smoking related cancers on our lives.

Strategic Partners

The Alberta Cancer Board is committed to providing a leadership role in cancer prevention on a province-wide basis. The benefits of prevention – fewer cases of cancer and fewer deaths from cancer – demand a continuous, concerted, long-term effort.

A vital part of this initiative will come from increased communication with other groups and organizations. By working to coordinate efforts with other groups, a measurable impact can be initiated and sustained in the area of prevention.

Several recent initiatives by the Alberta Cancer Board demonstrate the importance of these partnerships. "Screen Test" – The Alberta Program for the Early Detection of Breast Cancer is one example of the benefits to be gained from strategic partnerships. The program is for the early detection of breast cancer in women aged 50 to 69.

Guidelines for the program were developed by representatives from a cross section of groups including physicians, health units and specific interest groups.

Increased cooperation with other groups is proving to be an effective step. The Steve Fonyo Cancer Prevention Program was a joint project of the Alberta Cancer Board with the local Boards of Health in Lethbridge, Medicine Hat, Red Deer and Grande Prairie. The program collected information on attitudes, knowledge and behaviours about cancer risk factors. This information was used to help people make lifestyle changes that could reduce their chances of developing cancer.

Another new initiative – "Cancer Me??", an interactive computer program – involves working with industrial companies in the province to develop a baseline survey of knowledge, attitudes, risk factors and early detection behaviours from employees. This project, which grew out of the Steve Fonyo Cancer Prevention Program, now includes a strategic partnership with the Department of Psychology at Foothills Hospital and Psychosocial Resources at the Tom Baker Cancer Centre.

"A malignant tumour (i.e.cancer) is the result of unnecessary, unrestrained growth of cells in a particular part of the body. A remarkable and delicate balance exists within the body to maintain an adequate number of cells to perform necessary body functions. Cancer results from a disturbance of this homeostasis."

Dr. J. Berbel. Director. Division of Epidemiology and Preventive Oncology

The Oncogene

An "oncogene" is a particular type of gene which has been shown to have an effect on normal cells, triggering uncontrolled growth. Recent discoveries have revealed that each oncogene has a normal counterpart – a proto-oncogene – which is a "good" gene believed to direct the rapid growth of embryonic cells. The theory is that the proto-oncogene is `turned off'at birth. It remains `off' unless some factor activates it at which point it becomes an oncogene and begins to stimulate cell proliferation leading to cancer.

Cancer researcher Dr. Malcolm Paterson of the Cross Cancer Institute, is investigating at the molecular level, how radiation, ultraviolet light and chemical carcinogens are able to affect the proto-oncogenes as well as how inherited defects can enhance the process.

What Is Cancer?

In medical terms cancer is a multi-stage process by which normal cells are influenced to behave abnormally, resulting in uncontrolled growth.

The word "cancer" itself is misleading. Often interpreted as though cancer is a single disease, the facts are quite different. Cancer is not a single disease, it is a collection of over 100 types of diseases affecting different organs and caused by many factors. The result however is the same – uncontrolled cell growth.

Cancer is the leading cause of premature mortality in Canada. In Alberta, cancer will affect about one person in three; one in four will die from cancer.

Why Does Cancer Develop?

Research has revealed that cancer can develop in several ways. A tumour may develop because of exposure to carcinogens such as the ingredients in tobacco. For certain cancers, such as breast or bowel, there might be a hereditary factor present. For a small percentage of people, having a parent or grandparent who had a particular kind of cancer might increase their susceptibility, although this is no guarantee that they will develop cancer.

In the case of breast cancer, research has determined that a particular "oncogene" present in breast cancer patients may be related to prognosis – the probable course and outcome of the disease. This opens up the possibility that oncogenes could be a signpost indicating the direction for treatment.

How Does Cancer Progress?

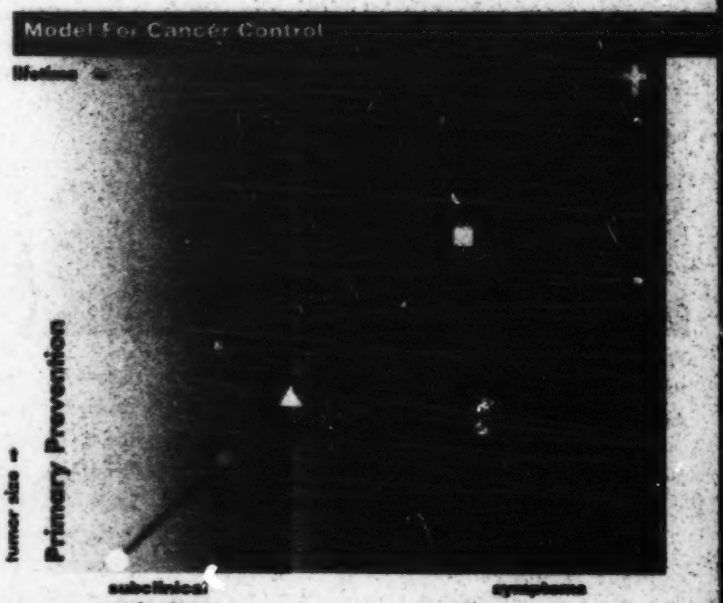
Cancer can develop following exposure to carcinogens. Cancerous cells are triggered into uncontrolled growth and, if left alone, will spread, resulting in disease, possible disability, even death. This happens over a long period of time.

This process can be interrupted at three levels: Primary Prevention – preventing the development of cancer in the first place; Secondary Prevention – detecting the cancer early and treating it before symptoms develop thereby enhancing the chances for a complete and total cure; or Tertiary Prevention – treating the disease after symptoms have developed, hopefully to cure the disease and if not, to prevent disability and improve the quality of life.

The Alberta Cancer Board is supporting and coordinating work in all these areas – prevention, early detection and treatment – to reduce the impact of cancer on our lives.

Primary Prevention means preventing the development of cancer in the first place. This can be done by avoiding those factors linked to cancer, such as tobacco, high fat – low fibre diets and overexposure to sunlight.

Early Detection means finding the cancer early and treating it before symptoms develop. In other words treating it when the chances for cure are better. Alberta's Program for the Early Detection of Breast Cancer is one such initiative. Pap smears for cervical cancer is another example of early detection which has proven to be very effective.



● Biological beginning of the tumour.
Primary prevention seeks to ensure this never happens. Before this point the tumour cannot be diagnosed.

▲ Secondary prevention (early diagnosis) The goal is to detect a tumour as soon as possible after initiation of the tumour and before clinical symptoms become apparent. Successful secondary prevention changes the natural history of the tumor.

■ Tertiary prevention seeks to avoid further complications of the tumour.

A substantial portion of cancer cases could be avoided by changing or eliminating exposure to certain risk factors. These are:

- eliminating tobacco use: tobacco is responsible for 30% of all cancer deaths (not just lung cancer). Two-thirds of Canadians are now non-smokers, and a majority of those who quit did it on their own.

Screen Test: The Alberta Program for the early detection of breast cancer.

- improving dietary habits: a high fat, low fibre diet and being overweight are associated with increased risk for cancer of the breast, gall bladder, colon and uterus. Diet is also related to cancer of the stomach, pancreas, prostate and esophagus. Easy ways to improve your diet include choosing lean cuts of red meat, removing the skin from fowl, and eating more fish, fruits, vegetables and high fibre, whole grain cereals.
- protection from exposure to the sun: the sun's rays burn just as quickly on hazy or lightly cloudy days and light summery fabrics screen only about 50% of the dangerous rays. Use a sunscreen with a Sun Protection Factor of 15 or over, cover up with a hat and wrap and stay out of the sun between 10 a.m. and 2 p.m when the sun's rays are at their strongest.

Screening

In order to be effective an "early detection" test must be economical, reliable, easy to do and acceptable to the public. Accessibility is important because of the large numbers of people that must be screened, only a few of whom may show early signs of cancer.
Naturally the screening is only useful if it reveals a cancer for which early treatment will have an effect.
So far there are only screening tests for cervical cancer (Pap Smear – women of all ages), and for breast cancer in women age 50 – 69.
Designing early detection tests for other forms of cancer is a priority for the Alberta Cancer Board.

Prevention: It's In Our Hands

Although the Alberta Cancer Board is working hard to improve the treatment of cancers, the fact is that many people are developing avoidable cancer. Statistics show that 50% – 70% of the cancer cases and deaths in Alberta could be avoided if more attention were paid to the risk factors associated with cancer.

Cancer research has demonstrated that many types of cancer can be prevented. Each and every one of us can take steps to prevent cancer from developing in the first place.

Dr. Sharon Campbell discussing prevention activities with Cathy Leinweber.

Common Misconceptions

For the past few years we have been asking people what they think about cancer. The answers reveal there are still some misconceptions. For example:

Though most of us believe that the chances of being cured of cancer are better today than ever before, at least 50% think that:

- everything causes cancer.
- there isn't much a person can do to prevent cancer.
- cancer is activated by a bruise or blow to the body.
- food additives are a major cause of cancer.
- All pollution causes cancer.

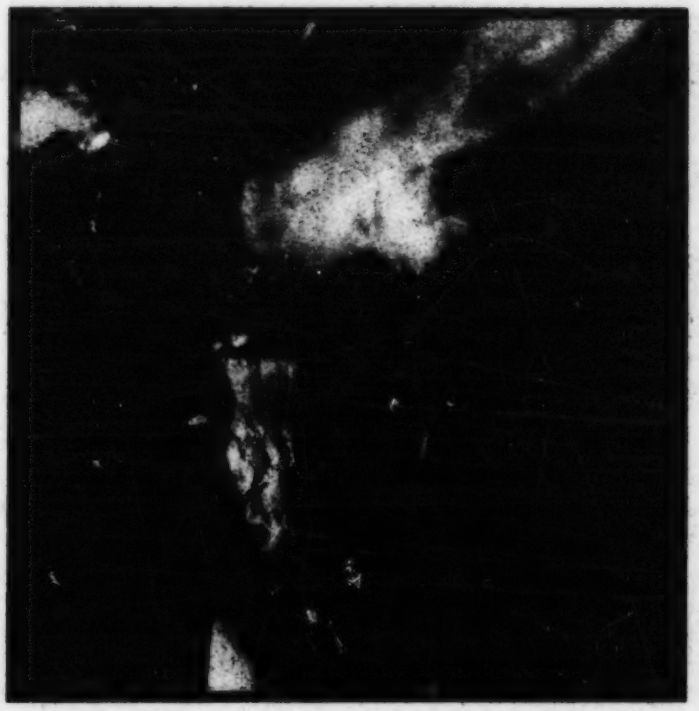
Less than half of those questioned believe that cancer risk is related to lifestyle choices.

Fact Not Fiction

Over the past decade research into the causes of cancer has brought about a better understanding of the different factors involved.

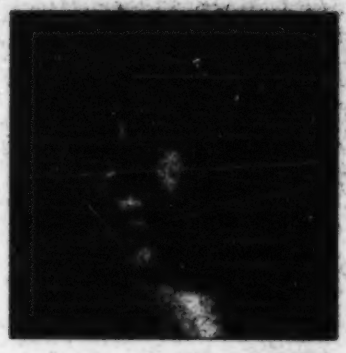
- we have more control over the major causes of cancer than we previously believed.
- 50% – 70% of cancers are caused by lifestyle choices – the things we do and what we eat.

"The public needs to know prevention is possible. There are a lot of steps people can take to lower their chances of getting cancer. There are also things we can do together to make cancer prevention a reality."
Dr. Sharon Campbell. Coordinator, Cancer Prevention Program



Passive Smoking and Sidestream Smoke

Cigarette smoke contains over 4000 chemicals. Sixty of these chemicals are cancer producing agents called carcinogens. Passive smoking takes place when a non-smoker breathes smoke exhaled by a smoker. Sidestream smoke is the smoke from a burning cigarette, cigar or pipe released into the environment and exposing anyone in the vicinity to the chemicals.



Dr. Sharon Campbell

Taking Charge of Tobacco

Cigarette smoking has been recognized as the most important public health problem facing Canadians. One in three of all cancer-related deaths are caused by tobacco use.

Smoking is our largest single preventable cause of premature death and disability. Most people begin to smoke as teenagers and are either unaware of the risk they are taking or simply don't believe that smoking is addictive. They may want to appear sophisticated and mature and see smoking as a way to imitate adult behaviour, demonstrate their independence and gain the approval of their peers. Unfortunately a significant percentage of teens who smoke continue to do so as adults.

Nicotine, the principal active ingredient in tobacco, is classified as a drug and addiction to it is a habit that can prove hard to break. In part the social acceptability of smoking has worked against efforts to stop smoking. In recent years fortunately, this acceptability is lessening. A worrying trend however is the increased use of chewing tobacco among teens and young adults. While the use of chewing tobacco may avoid the social unacceptability of smoking, the danger of cancer is real. Cancers linked with smoking include lung cancer and cancers of the larynx, esophagus, cervix, stomach and bladder.

While an over-whelming majority of smokers would like to quit, many of them continue to smoke because of a combination of factors… nicotine dependence, habit, fear of weight gain, stress, anger, anxieties, alcohol and caffeine consumption and simple availability.

At the smoking-cessation classes offered by the Tom Baker Cancer Centre in Calgary, the two most common reasons given by smokers who wish to quit are increasing social unacceptability and the negative effects of smoke on both themselves and non-smokers. Taking charge of the tobacco habit and eliminating smoking offers positive long-term health benefits.

After five years of not smoking, the lung cancer death rate for the average ex-smoker has been cut by almost half. Within 10 years of stopping, the lung cancer death rate for average ex-smokers can barely be distinguished from non-smokers.

"We get a lot of messages that equate certain foods with having a good time. Snack foods are advertised as being essential to the success and enjoyment of many social events. Few of these messages have anything to do with nutrition."

Lee Cowan,
Assistant Manager,
Clinical Nutrition,
Cross Cancer Institute.

Lee Cowan

Staying Healthy With Food

It may seem obvious to us today that food and nutrition have a profound impact on health, but only 20 years ago the idea of relating cancer to diet and nutrition was considered revolutionary.

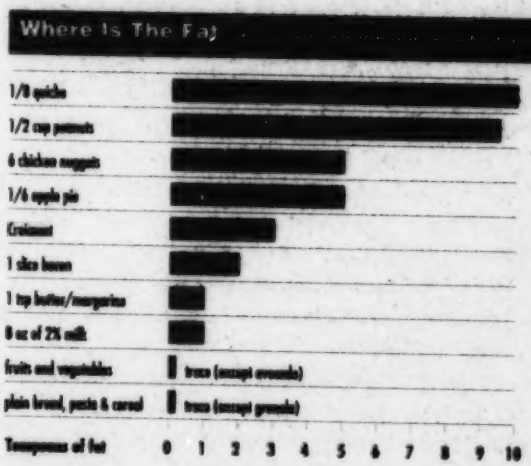
The relationship between diet and cancer has been examined extensively since then and two things have become clear: there is a strong positive association between diet and cancer; but specific causal relationships have not yet been established.

In other words some dietary factors are related to an increased risk of cancer and other dietary factors are related to a reduced risk of cancer but there is no clear evidence that a specific food will either protect or promote cancer. And there might never be definitive evidence due to the complex nature of our diet as a species and the difficulty of obtaining valid measurements.

One of the most obvious risk factors in our diet is fat. Dietary fat has been associated with cancers of various sites, including breast, colorectum, prostate, ovary and endometrium. Fat is also a significant factor in the development of heart disease.

Most Canadians eat a diet in which the total energy content contains approximately 40% fat when guidelines suggest that 30% is all that is required. The most straightforward adjustment many of us can make to our eating habits is to reduce fat intake and include several servings of fruits, vegetables and whole grain cereal products in our daily diet.

If you're wondering from where the fat in your diet is coming, convenience and fast foods tend to fall in the increased risk category because of their high fat content. Many commercially baked white breads, cakes and pastries can also increase your risk of cancer due to a combination of high fat and low fibre.



While staying healthy with food means eating a well-rounded diet based on moderation, research also indicates some "micronutrients" such as calcium (found in milk and cheese), Vitamin A (found in whole grain cereals and eggs), Vitamin C (found in citrus fruits) and Vitamin E (found in fish) can reduce your risk of cancer. It is important to understand that these micronutrients should come from food rather than pills. Further research is needed to determine the role of micro-nutrients in the prevention of cancer.

Developing A Balanced Relationship With The Environment

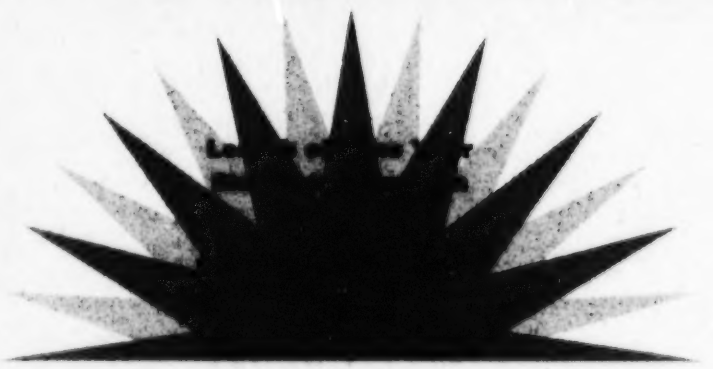
Over-exposure to the sun has been firmly linked to certain types of cancer: basal and squamous cell carcinoma which are usually non-fatal and malignant melanoma which can often be fatal.

The sun's rays contain ultra-violet light which reaches Earth as ultra-violet A and B rays. UV light is believed to weaken the body's immune system and both kinds of rays are linked to skin cancer. The longer UV rays... Ultra-violet A... deeply penetrate the skin and are most responsible for the wrinkled, aged look that characterizes the long-term sunbather. Ultra-violet B, the shorter length rays, usually promote sunburn but can also contribute to wrinkling. All sources of ultra-violet rays including tanning booths should be treated with caution.

While everyone is at risk, depending on their exposure and tanning habits, children are particularly vulnerable. Up to 80 per cent of the average Canadian's exposure to sunshine occurs before age 20. It is possible that one bad sunburn as a child may double the risk of skin cancer later in life.

Whether or not any tan is harmful is still under discussion. What is clear however is that a sunscreen with a Skin Protection Factor of 15 or more is a useful way to minimize the risk. Sun hats and protective clothing for those working or otherwise spending time in the sun are also a wise precaution.

Sunscreens That Count



Choosing a skin protection factor number for your particular needs can be arrived at by using the following formula:

Length of Time Your Skin Takes To Burn X Skin Protection Factor

Example: 15 minutes to burn X SPF 15 = 225 minutes of protection (3 hours 45 minutes)

Example: 10 minutes to burn X SPF 30 = 300 minutes of protection (5 hours)

Primary Prevention & Early Detection

"Canadians today regard full access to health care as a right and if our health breaks down we expect the system to correct the problem. But good health is also a responsibility and in order that the system not be abused we must each take personal responsibility for living a healthy lifestyle."
Dr. L. Martin Jevry

There is no doubt that age is the single greatest risk factor for cancer. But whether the risk increases with age because we are living longer and thus escalating our exposure to external factors or whether cancer occurs because there is a problem inside the body that appears as we grow older has yet to be determined. It may be a combination of both factors.

One step to take is to avoid as many of the risk factors as possible. Prevention, particularly primary prevention or avoiding carcinogens in the first place, is a route which must be followed by a much greater percentage of the population. All of us must be active partners with the health profession in our own health care.

Primary Prevention: The Steve Fonyo Cancer Prevention Program

Despite the fact that cancer will touch one in three Albertans, most people don't give it much thought. For selected residents of Red Deer and Lethbridge that attitude ended in 1987 with a knock on the door.

A unique community-based project presented Albertans in Red Deer, Lethbridge, Grande Prairie and Medicine Hat with an opportunity to increase their knowledge about cancer, change their attitudes and particularly their behaviour. In two of the cities – Red Deer and Lethbridge – that took the form of a comprehensive risk assessment questionnaire for adults age 35-64 delivered by door-to-door canvassers. In Lethbridge and Medicine Hat, a community-based education program was planned and delivered by local community advisory boards. In the fourth city – Grande Prairie – people received risk reduction advice in the mail.

For the Alberta Cancer Board, the Steve Fonyo Cancer Prevention Program represented a way to gain valuable insights on Albertans' attitudes about cancer and information on the implementation of cancer prevention activities in a community setting. It was the only program of its kind in Canada and one of the few in the world.

The Program involved two main strategies: Individualized Intervention and Community Intervention.

Individualized Intervention featured a risk assessment questionnaire distributed throughout Lethbridge and Red Deer followed up with a letter containing individualized cancer prevention recommendations. The Program also offered a variety of educational activities at a health unit. Overall, 52% of eligible adults returned a questionnaire, an indication of a high level of interest.

Albertans obviously believe in prevention as a route to reduce the frequency of cancer. Those who received a letter that recommended they make changes were invited to attend activities at a health unit. Personal counselling was complemented by self-help kits and group classes.

Community Intervention took a slightly different approach. In both Lethbridge and Medicine Hat an invitation was sent to every agency in the community with an interest in health improvement to attend an information session on the Steve Fonyo Program. From those who attended, a volunteer Community Advisory Board was formed which then planned strategies to be implemented over a two year period.

Although the initial intervention program is complete, both communities now have ongoing programs featuring activities relating to cancer prevention and early detection of cancer. These activities include community newsletters,

"Preventing cancer is a complex undertaking. You have to think not only about the individual, but also about the environment in which that individual lives his or her daily life - the physical, social and political environment."
Judy Birdsell,
Steve Fonyo Cancer Prevention Program

Quiting Smoking?

Deal with the urge to smoke using the Four D's:
- Delay.
- Deep Breathe.
- Drink water or fruit juice.
- Do something else.

quit-smoking contests, nutrition contests, sun-smart programs and support for non-smoking by-laws.

Implementation of the Individual and Community Intervention programs by the Alberta Cancer Board generated useful experience in working with local Boards of Health, community agencies and volunteers. Evaluation of the programs will provide a valuable database.

But the bottom line revealed that Albertans liked the process. They liked receiving the information, they enjoyed attending events from group classes to school programs, and most importantly they implemented changes in their lifestyle.

Tom Baker Smoking Cessation Program

Now in its sixth year of operation the Smoking Cessation Program at the Tom Baker Cancer Centre has already provided a model for similar programs in Lethbridge and Medicine Hat. Developed as a group program, it enrols over 300 smokers a year. The content has been refined over time to help smokers end their addiction. Each course consists of (five) sessions and a followup session with the total course taking some (three) months.

Techniques applied in the sessions are based on recognized smoking cessation practices and include stress management, weight control and coping with situational temptation.

Dealing with the urge to smoke is a problem for most would-be ex-smokers. The program counters with the Four D's:

- Delay.
- Deep Breathe.
- Drink water or fruit juice.
- Do something else.

Primary Prevention: "Cancer-Me???"

The same advice offered in the Steve Fonyo Cancer Prevention Program is now being provided by an interactive computer program, called "Cancer-Me???," in selected workplaces in Calgary. This new research project will determine if company employees like using computers to answer questions about their lifestyle and to receive personal advice on how to reduce their own risk of developing cancer. Even more important is to determine if people change their risk behaviours when they receive this kind of information by computer.

If the users accept information provided in this manner and act on that information it would be a good way to reach many people and help them reduce their chances of getting cancer.

Early Detection: Breast Screening Program

One of the most effective methods of reducing the death toll from breast cancer is now underway in Alberta.

"Screen Test" – the Alberta Program for the Early Detection of Breast Cancer is the result of guidelines developed by an advisory committee composed of representatives from the Alberta Cancer Board, the Advisory Council on Women's Issues, the Alberta Breast Cancer Foundation, the Canadian Cancer Society, the Alberta Medical Association, the Health Unit Association of Alberta, the College of Physicians and Surgeons, the Alberta Association of Registered Nurses, the Alberta Society of Radiologists and the Community Health Nurse Administrators Association.

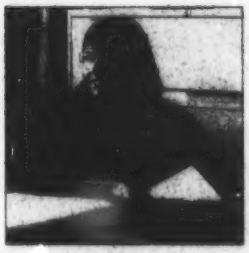
This strategic partnership resulted in the establishment of a comprehensive program of screening and education designed to reach women aged 50 – 69. The goal of "Screen Test" is to reduce the

"Breast cancer is a tragic and important disease right now to Alberta women and will continue to grow in importance as our population ages. While the decision to be screened for breast cancer will not prevent a woman from developing the disease it is a pro-active step towards controlling her own health."

Dr. Heather Bryant. Director. Alberta Program for the Early Detection of Breast Cancer.

mortality rate from breast cancer by at least thirty per cent in the target age group over the next 15 years. Given today's population that would amount to saving 75 lives per year.

Edmonton and Calgary now each have a Screen Test Centre, a dedicated mammography screening facility capable of serving 7,500 women per year. Mammography screening uses a low dose breast X-ray capable of detecting tumours in an early stage of development. A mobile unit for rural areas is expected to be in operation by late 1991.



▲ Judy Birdsell

▶ Dr. Heather Bryant *(left)* with Veronica Novakowski, Radiology Technician.

The program emphasizes a combination of screening and education. It focuses on the need for a monthly breast self-examination as well as a yearly breast examination by a health professional for all women over 50. Education materials provided at each Centre include videos and pamphlets on the best methods of breast self-examination. In addition a toll-free phone line is available to provide information.

Early Detection: Pap Smear

Now part of a standard gynecological exam, the Pap Smear is still the most effective means of early detection for cancer of the cervix,the third most important cancer in females aged 15 – 44.

With a Pap Smear cells from the surface of the cervix are collected. These cells are examined for pre-cancerous or cancerous changes which, when present, can initiate treatment early enough to be effective.

Since the introduction of the Pap Smear in the 1950's the death rate from cervical cancer has shown a significant decline.

Dollars Today Versus Dollars Tomorrow

The largest segment of the population consists of those born between 1946 and 1960... the "baby boomers." As they approach and enter the years in which they are most at risk from cancer, the frequency will rise proportionately. In turn this will put pressure on health care facilities, pressure that must be measured in both professional and economic terms.

Alleviation of some of that pressure could come from an increasingly effective prevention program. The combination of primary prevention and early detection offers a means to reduce the impact of cancer on Alberta's social fabric.

The Alberta Cancer Board is committed to providing leadership in the co-ordination and implementation of comprehensive cancer prevention initiatives. With strategic partnerships in place and through the use of information programs designed to take advantage of today's communications techniques, the goal will be to increase public awareness and participation in methods that can be implemented both individually and collectively.

What we are after is a change of attitude. A change that recognizes that tobacco use, excess fat consumption and excessive tanning carry risks to health. We are exploring methods that will advance the moment of diagnosis ever earlier in the process. The success of the pap smear and the mammogram point the way. The enthusiasm with which the Steve Fonyo Cancer Prevention Program was received indicates that Albertans are indeed receptive to prevention and are ready to change their attitude and their behaviour regarding the risk factors associated with cancer.

Facts about the Alberta Cancer Board

Alberta Cancer Board operating budget ***$52,078,096.00***

Alberta Cancer Board Capital Budget ***$10,606,326***
(Cross Cancer Institute Redevelopment Project)

Research budget ***$4,639,302.00***

Research projects

86 (administered by the Alberta Cancer Board)
137 (ongoing protocols requiring monitoring and annual ethics approval by the Alberta Cancer Board)

Specialty care areas

Gynecological Oncology
Medical Oncology
Nuclear Medicine
Oncological Pathology
Pediatric Oncology
Radiation Oncology
Radiology
Surgical Oncology
Pyschosocial Oncology
Pain and Symptom Control

Number of new cancer patients in Alberta in 1989

11,157

Volunteers

450 (Cross Cancer Institute)
180 (Tom Baker Cancer Centre)

Staff

(all clinics)	960 (total)
Medical staff	47 (full-time) 3 (part-time)
Nursing staff	108 (full-time) 103 (part-time)
Scientific staff	29 (full-time)
Technical staff	156 (full-time) 50 (part-time)
Professional and Support staff	375 (full-time) 89 (part-time)

Physicians with active or consulting privileges

238 (Cross Cancer Institute)
204 (Tom Baker Cancer Centre)

Students (undergraduate and graduate students completing medical training at the cancer centres

20 (Cross Cancer Institute and Tom Baker Cancer Centre)

Inpatient beds

76 (Cross Cancer Institute)
45 (administered by the Foothills Hospital for the Tom Baker Cancer Centre)

Outpatient visits

85,222 (Cross Cancer Institute and Associate Clinics)
80,684 (Tom Baker Cancer Centre and Associate Clinics)

Sources of Funds

Operational

Alberta Health
Discretionary Revenue

Capital

Alberta Public Works Supply & Services

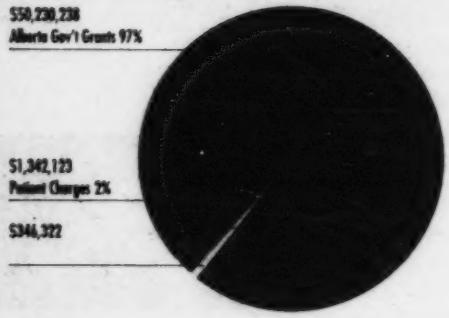
Research and Education

Alberta Cancer Board
Alberta Cancer Foundation
Alberta Heritage Foundation for Medical Research
Alberta Heritage Savings Trust Fund
Canadian Cancer Society
Government of Alberta
Health and Welfare Canada
Industry
Medical Research Council
M.S.I. Foundation
National Cancer Institute of Canada (NCIC)
National Institutes of Health (NCI-U.S.)
University of Alberta
University of Calgary

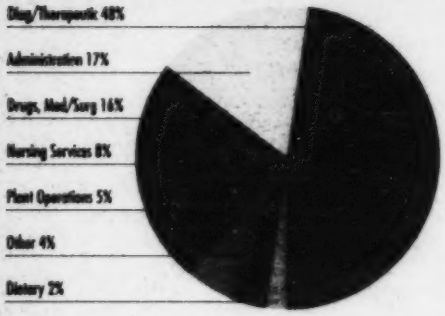
Statement of Revenue, Expenditure and Equity Balances

for year ending March 31, 1990

Operating Revenue



Operating Expenditure



	Operating
Revenue:	
Grants	$50,230,238
Patient charges	1,342,123
Interest	—
Donations	—
Other	346,322
Ancillary operations:	
Edmonton Radiopharmaceutical Centre	—
Parking	—
Coffee Shop and Gift Shop	—
	51,918,683
Expenditure:	
General	52,078,096
Research	—
Acquisition of fixed assets	—
Construction in progress;	
W.W. Cross Cancer Institute	—
Parkade	—
Ancillary operations:	
Edmonton Radiopharmaceutical Centre	—
Parking	—
Coffee Shop and Gift Shop:	
Expenses	—
Transfer to Cross Cancer Institute Volunteer Association	—
	52,078,096
Excess (deficiency) of revenue over expenditure for the year	(159,413)
Equity balances at beginning of year	(437,166)
Adjustment for accrued vacation pay	—
Equity balances at end of year	**$ (596,579)**

March 31, 1990

This information has been extracted from the audited financial statements of the Alberta Cancer Board. A copy of the complete audited financial statements is available upon request.

Discretionary	Capital	Alberta Heritage Research Projects	Endowment and Trust	Total 1990	Total 1989
$ —	$9,444,733	$2,689,901	$ —	$62,364,872	$53,007,643
23,912	—	—	—	1,366,035	1,312,939
1,449,887	—	19,036	31,787	1,500,710	1,082,003
—	452,653	—	6,600	459,253	415,037
—	—	—	—	346,322	281,316
962,708	—	—	—	962,708	876,766
209,907	—	—	—	209,907	157,747
232,996	—	—	—	232,996	216,822
2,879,410	**9,897,386**	**2,708,937**	**38,387**	**67,442,803**	**57,350,273**
25,528	—	—	—	52,103,624	47,102,726
—	—	2,488,305	31,210	2,519,515	2,400,720
133,570	4,449,419	220,632	22,099	4,825,720	1,421,203
—	2,550,633	—	—	2,550,633	2,233,452
—	2,704,464	—	—	2,704,464	2,220,007
789,578	—	—	—	789,578	747,399
157,054	—	—	—	157,054	59,537
158,225	—	—	—	158,225	185,395
74,771	—	—	—	74,771	31,427
1,338,726	**9,704,516**	**2,708,937**	**53,309**	**65,883,584**	**56,401,866**
1,540,684	192,870	—	(14,922)	1,559,219	948,407
4,545,447	223,217	—	312,535	4,644,033	5,617,338
—	—	—	—	—	(1,921,712)
$6,086,131	**$ 416,087**	**$ —**	**$297,613**	**$ 6,203,252**	**$ 4,644,033**

Balance Sheet

as at March 31, 1990

March 31, 1990

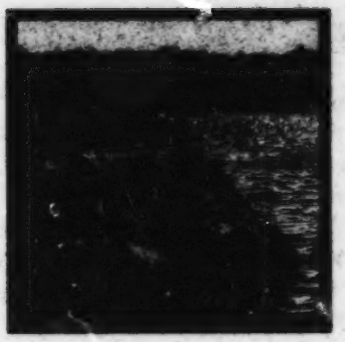
This information has been extracted from the audited financial statements of the Alberta Cancer Board. A copy of the complete audited financial statements is available upon request.

Assets

Current assets:	1990	1989
Cash	$ 748,247	$ 1,584,978
Short-term deposits	10,540,744	9,409,219
Accounts receivable	2,491,876	1,483,640
Inventory, at cost	1,536,518	1,369,100
Prepaid expenses	317,481	149,291
	15,634,866	**13,996,228**
Funds held in trust by Alberta Cancer Foundation	**3,549,031**	**3,549,031**
Fixed assets, at cost:		
Furniture and equipment	18,863,449	16,856,554
Research assets	7,876,267	5,457,055
Construction in progress, W.W. Cross Cancer Institute	5,681,855	3,131,222
Parkade	4,924,471	2,220,007
Improvements to buildings and leaseholds	3,240,590	3,240,645
	40,586,632	**30,905,483**
	$59,770,529	**$48,450,742**

Liabilities and Equity

Current liabilities:		
Accounts payable	$ 4,654,045	$ 4,705,507
Research projects grants payable	1,467,077	1,359,541
Deferred capital and operating grants	1,269,486	1,365,435
Accrued vacation pay	2,041,006	1,921,712
	9,431,614	9,352,195
Equity:		
Equity balances	6,203,252	4,644,033
Funds entrusted to Alberta Cancer Foundation	3,549,031	3,549,031
Equity in fixed assets	40,586,632	30,905,483
	50,338,915	**39,098,547**
	$59,770,529	**$48,450,742**



Alberta Cancer Foundation

Alberta Cancer Foundation

In September 1984, with an amendment to the Cancer Programs Act, the Legislative Assembly established the Alberta Cancer Foundation to handle charitable donations on behalf of the Alberta Cancer Board and its clinics - the Cross Cancer Institute in Edmonton with its Associate Clinics (Central Alberta Cancer Centre, Red Deer, Grande Prairie Cancer Centre, Peace River and Fort McMurray Cancer Clinics) and the Tom Baker Cancer Centre in Calgary with its Associate Clinics (Lethbridge Cancer Clinic and Medicine Hat Cancer Clinic.) Donations to the Foundation improve patients' quality of life, support educational and research programs and enhance diagnosis and treatment through the purchase of medical equipment.

Donations are tax-deductible, subject to the prevailing regulations of Revenue Canada. Every effort is made to ensure that donations are used for the purpose directed by the donor. Donations can also go towards a general fund which is made available for research, education and treatment. Final approval is the responsibility of the Trustees of the Alberta Cancer Foundation.

Board of Trustees

Chairman
Mr. T.E. (Ed) Poppitt

Members
Mr. Arthur D. Davis
Mr. Ralph Hodgin
Mr. Glenn V. Sundstrom
Dr. Jean-Michel Turc

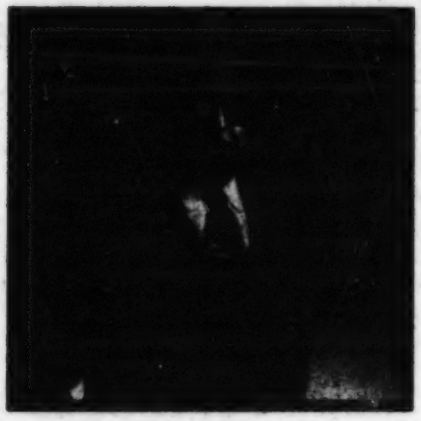
Executive Secretary
Ms. Susan L. Green

ALBERTA
CANCER FOUNDATION
6th Floor, 9707 - 110 Street
Edmonton, Alberta T6K 2L9
(403) 482-9363

Chairman's Report

The Alberta Cancer Foundation now marks its sixth year of providing Albertans with an opportunity to contribute towards cancer research, education, patient comfort and hospital equipment. In our report for 1989-90, we present, for your information, a small sampling of projects that have been made a reality through donations to the Alberta Cancer Foundation.

This year was particularly encouraging in that we saw the opening of the Southern Alberta Cancer Research Centre. Albertans from all walks of life contributed to make this important project a reality. Their generosity offers convincing proof that Albertans realize that if cancer is to be fully understood and effectively treated, it will only be through the efforts and collaboration of leading medical and scientific figures. Furthermore, Albertans understand that to attract that kind of talent you must offer working conditions and research facilities that meet international standards. The Southern Alberta Cancer Research Centre is now ready to take its place as part of the multi-national effort to find the cure for cancer.



Foundation activities are not confined simply to funding research and purchasing equipment. The human face of our activities can be found in the daily accomplishments of the staff and volunteers at the Cancer Centres and the Associate Clinics. These activities help on a more personal level: organizing and participating in sports-related fund raising, easing family visitations, helping in public education programs, the list goes on. The effort, competence and care of everyone involved is a tremendous resource in lessening the impact of cancer.

T.E. (Ed) Poppitt
Chairman
Alberta Cancer Foundation

The Research Factor

The Alberta Cancer Foundation has been in existence for six years. In that time the support through donations has been strong and unwavering. Research has been and will continue to be a priority. At least one notable milestone has been reached with the completion of Project Alpha: the opening of the Southern Alberta Cancer Research Centre.

There is no argument that research holds the key to better treatment programs and an eventual cure for cancer. But which line of research? Which theory should be pursued? What program offers the most promising results? Those questions are faced every year by the Alberta Cancer Foundation when new and on-going projects must be assessed and approved.

In 1985 the Foundation identified a new goal - the ability to provide a research endowment amounting to $12 million dollars. The Cancer Research Endowment Fund has been steadily increasing since then. In the future, with the accrued interest from this Fund, the Foundation will be able to support a much wider range of projects and that will be a benefit for all Albertans.

Research Funding Committee

Acting on behalf of the Alberta Cancer Foundation, the Research Funding Committee, a panel of experts in cancer research, has the responsibility to rate the scientific merit of research applications and award Alberta Cancer Foundation funds. Such projects must have received ethical approval before being considered by the Committee for support.

The Research Funding Committee is seeing a perceptible increase in the number of applications for research funds. Dr. Rene Lafreniere is the President of the Tom Baker Cancer Centre Medical and Scientific Staff. In his view an even more significant fact is that the calibre of application is steadily improving. That's a good news-bad news situation for him. As Chairman of the Research Funding Committee, Dr. Lafreniere oversees the quarterly disbursement of funds to support scientifically meritorious projects submitted by many researchers. "The scientific and medical staff has grown significantly in Alberta. We're seeing more and more high quality applications and we do not want to turn down those that could make a difference in the search for cancer cures and the keys to cancer prevention."

Committee funds are put to use in two distinct areas: studentships and research fellowships and pilot and bridging grants. The studentships and research fellowships are used to enhance research but it is the pilot and bridging grants that often lead to the more difficult decisions.

Pilot Grants are a means of funding research that could be described as a bright idea that might not qualify for support by major national and international funding agencies. "Most of the major agencies are reluctant to fund research that appears to be innovative but might lack support in the literature," says Dr. Lafreniere. "If there is a good proposal, one that's well written and well thought out even though it has never been proven, we might want to support that." The upside is that with a pilot grant the researcher may be able to generate enough data to prove his point; at least to the stage of interesting a major funding agency. Even if the research does not achieve results then, for a small amount of money, the process guides other people away from the same mistake.

Bridging Grants are intended to provide temporary support to a researcher whose funding is exhausted prior to a project's conclusion yet before the receipt of funds acquired through other research grant competitions. Dr. A.R.E. Shaw, a Senior Research Scientist with the Alberta Cancer Board sees a bridging grant as an invaluable means of overcoming a funding gap. "It gives an opportunity to keep going," he says. "Where otherwise you'd have to close down, losing valuable research staff and momentum that may have taken months to develop on a specific research project." Bridging funding usually comprises a six month grant although nine month grants have been known if the project warrants the extra time. Both forms of funding are used to offset the hard costs of research until the receipt of larger grant awards from national or international grant agencies. These hard costs include technician's salaries, laboratory supplies and equipment purchases.

According to Dr. Lafreniere the applications for funds equally reflect the two fundamental fields of cancer research: basic science which is primarily laboratory research; and clinical science which, in most cases, encompasses work with patients. Foundation funds are currently being applied in the work of several scientists, two of which are Dr A.R.E Shaw and Dr. Raul Urtasun.

Dealing With Primary Cell Structure

Cell adhesion in a blood vessel.

For Dr. A.R.E. Shaw, a Senior Research Scientist with the Alberta Cancer Board and Associate Professor of Medicine at the University of Alberta, funding from the Alberta Cancer Foundation has helped in two ways: by directly funding a pilot research study; and by providing funding for a postdoctoral Fellow to work in his laboratory. Dr.Shaw's study involves molecules which mediate cell adhesion. He wishes to understand how the molecules are involved in the decisions the cells make as to where and when to grow and move. The decision-making machinery is profoundly altered in cancer cells, allowing them to move to and grow in inappropriate locations.

Clarification of this complex process may suggest new approaches to therapy. Of key importance are the integrins - a diverse family of adhesion proteins - which regulate cell attachment and speading required for cell growth. Integrins are thought to convey "messages" from the cellular environment telling the cell where it is, and how to respond. Since integrins are not message-generating molecules, the search is on for other proteins which might perform this function. Dr. Shaw's laboratory has evidence linking CD9, a widespread component of carcinomas and leukemia cells to the delivery of these messages.

Dr. Shaw is using a pilot project grant from the Foundation to clone the gene for CD9. He is also seeking ways to introduce the gene into cells which lack CD9 in order to study its function. These preliminary studies are required to apply for support from a national granting agency. "Once you have that gene," explains Dr. Shaw, "the door is wide open to all kinds of manipulations." By altering the gene, the regions involved in the message-transferring process can be defined.

The study of the intracellular messages produced by CD9 has been assisted by Dr. Lee Griffith, a recent graduate of the University of Alberta and the recipient of the McCartney Post Doctoral Fellowship. Dr. Griffith will soon enter the global research community by taking a position in the Department of Molecular Neurobiology at the Swiss Federal Institute in Zurich. Dr. Griffith's work on CD9 has been accepted for publication in the leading international hematology journal "Blood."

Funds In Action

Two questions are being asked by Dr. Raul Urtasun's team at the University of Alberta and the Cross Cancer Institute. The first queries whether it is possible to train cancer patients on an endurance program and will such patients train similarly to healthy individuals. The second is whether or not an exercise program will increase the period of remission achieved through chemotherapy and radiotherapy.

Exercise plays a large part in the questions so it is perhaps only natural that the research is being supported through funds raised for the Alberta Cancer Foundation by the Glen Anderson Cross Cancer Institute Golf Tournament.

The studies involve patients with Small Cell Lung Cancer (SCLC) because it is a cancer that can be successfully placed in remission but which can reappear quite quickly - usually eight or nine months, compared with some cancers which can take years to reappear if at all.

Laboratory tests with rats indicate that exercise does have an effect on tumour growth. Dr. V.E. Baracos who is working with Dr. Urtasun, has published her findings to this effect in the literature. Her findings showed that the growth of a chemically-induced tumour in a rat was inhibited by an exercise program; in this case swimming. Sedentary rats, by comparison, showed normal tumour growth. Plans are underway to test a small group of SCLC patients with an exercise program and observe the results - thus the choice of SCLC since the period of remission is normally not a variable.

As to whether or not patients can handle and subsequently benefit from an exercise program, Dr. Urtasun worked with University of Alberta physiologist Dr. R.G. Haennel to develop a program using stationary cycles. "Part of my question is the matter of parameters," says Dr. Urtasun. "We are trying to determine the tolerance for exercise and fitness after treatment."

To date it would seem that patients who have experienced chemotherapy or radiotherapy are in fair condition. The exercise program reveals exactly how much work is being put out so a comparison with a group of patients who are not being exercised offers clear results. As an additional feature Dr.Urtasun is comparing his patients with one group who had cardiac by-pass surgery and another group of normal controls matched for sex and age. His team of investigators are also monitoring the cellular and humoral immunity of the exercised and non-exercised group of patients. His preliminary observations will be reported at the International Congress on Sports Medicine and Human Performance in Vancouver, April 1991.

Palliative Care Fellowship a First

Support from the David Overton Endowment Fund and a grant from Knoll Pharmaceuticals Canada has led to the appointment of Dr. Robin Fainsinger as the first University of Alberta Palliative Care Fellow.

The official announcement on November 1, 1990 was made by Mr. T. E. Poppitt, Chairman of the Alberta Cancer Foundation's Board of Trustees.

Mr. William Stinson, Chairman, President and CEO, Canadian Pacific Limited, receives congratulations from Mr. Ed Poppitt, Chairman, Alberta Cancer Foundation.

Palliative care is a field of study that includes a specific focus on pain and symptom control, inpatient, outpatient and home care as well as the issues surrounding the development and promotion of awareness of new concepts being offered the terminally ill.

Dr. Fainsinger is currently conducting his studies at the Cross Cancer Institute and the University of Alberta Hospitals. It is believed that his appointment is the first palliative care fellowship in Canada.

The financial support for the Fellowship comes in part from a grant from Knoll Pharmaceuticals Canada. The company has a long history of support for clinical research and education in the field of palliative medicine. Additional generous support comes from the interest generated by the David Overton Endowment Fund. The late Mr. Overton expressed a desire for the fund to support work in the area of palliative care.

Project Alpha Opening Ceremonies

With the opening of the Southern Alberta Cancer Research Centre on March 30, 1990, the fundraising and construction phase, designated Project Alpha, was successfully concluded.

It's been a project three years in the making during which time donations and grants raised over four million dollars. While initial grants came from the Department of Advanced Education and the University of Calgary, the remainder of the contributors ranged from corporate sources to the residents of small communities across Southern Alberta.

Every contributor shared the same goal: to see the establishment of a cancer research facility that would attract world-class scientists and researchers. Today that ambition has taken shape. Located in the Heritage Foundation for Medical Research Building on the Foothills site in Calgary, the Centre occupies approximately 100,000 square feet on the third floor of the building. Priorities for the research staff include cell biology, metastasis and molecular oncology.

For the Project Alpha Cabinet and Board of Trustees, the unveiling of the Donor Wall was much more than a highlight of the opening ceremony, it revealed the depth of commitment Albertans are willing to apply to cancer research.

Pain Relief Takes Many Forms

Patients at the Cross Cancer Institute have a new form of pain relief thanks to two recent donations. Nintendo games and colour television sets offer a welcome distraction in the waiting room; while for patients and families elsewhere, a Datex Satlite-Trans Pulse Oximeter measures oxygen saturation, providing a painless alternative to arterial punctures.

Our thanks to the Independent Order Of Foresters for their contributions to pain relief.

Camp Beat It: "No one's Alone"

For three years Camp Beat It has provided the natural relaxations afforded by a summer camp to families who have children diagnosed with cancer, or who have lost a child to cancer.

The camp itself is held on the grounds of Camp He Ho Ha (Health, Hope, Happiness), about 80 km west of Edmonton. The organization for the Camp is provided by the Northern Alberta Pediatric Parents Association (NAPPA) with financial support from the Alberta Cancer Foundation and the Ralph Hole Jr. Memorial Fund.

For children and parents the camp is a haven from treatments. It offers the opportunity for families to experience some fun together and sort out their feelings about cancer. For parents who have lost a child to cancer, Camp Beat It provides a supportive environment that helps them to come to terms with their loss.

Southern Alberta Volunteers

From public tours to monthly newsletters, the operations of Volunteer Services at the Tom Baker Cancer Centre in Calgary generated enough activity to require the relocation of the Volunteer Services office to the remodelled Servery. The move accomodates the increasing interaction of Volunteer Service with the Alberta Cancer Foundation and the public. This move also reflects the increased involvement of volunteers in public relations and Foundation activities such as the Public Lecture Series, tours and donor recognition events.

The fall of 1989 saw a joint retreat at Entheos Lodge for support volunteers from the Tom Baker Cancer Centre and the Cross Cancer Institute. Issues addressed during the retreat will result in a number of new initiatives with benefit for cancer patients and families.

Decade of Decision: The Alberta Cancer Foundation Approaches the Year 2000

Over the next few years it is possible that there will be an increase in the number of charitable foundations in Alberta. More and more institutions are setting up their own Foundation as a means of raising money and many will be targetting the same dollar.

No matter what happens, the Alberta Cancer Foundation will become a much more aggressive fundraiser. The focus will be work on a province-wide basis to expand our resources available for research, special medical equipment and the improvement of our patients' quality of life.

Mr. T.E. Poppitt, Chairman of the Foundation, recognizes some of the drawbacks in that course of action. "The mere fact that you run a province-wide campaign requires additional time and energy," states Poppitt. "But when you compare that with the additional monies that are expected to come in as a result, it's well worth the investment."

Broad-spectrum campaigns are one thing, but the Alberta Cancer Foundation has traditionally relied on donations on a more personal level. That too has a new dimension called Planned Giving.

Put simply, "planned giving" is a method whereby individuals can gift the organization of their choice by using vehicles such as insurance policies to put money away towards a future donation. In the case of insurance policies the premiums can be used as a tax-deduction by the donor.

Planned giving or "Deferred Giving" as it's sometimes called is one donation route available to everyone, no matter what their means. As the pressure to maintain or even increase funding levels is applied, there will be a need for more such avenues. One fact is certain: the cost of research and treatment is not going to decrease.

Financial Statements

Balance Sheet
as at March 31, 1990

This information has been extracted from the audited financial statements of the Alberta Cancer Foundation
A copy of the complete audited financial statements is available upon request.

	1990	1989
Assets		
Cash	$ 219,735	$ 417,720
Short-term deposits	5,121,726	4,575,000
Due from Alberta Cancer Board	462,524	241,108
Accrued interest	46,432	2,397
Accounts receivable	—	1,462
	$5,850,417	**$5,237,687**
Liabilities and Fund Balances		
Accounts payable	$ 8,067	$ 11,790
Restricted funds,	234,121	97,457
Unrestricted fund	1,349,398	1,047,059
Reserve fund	709,800	532,350
Trust fund	3,549,031	3,549,031
	$5,850,417	**$5,237,687**

Statement of Operations and Fund Balances
for the year ended March 31, 1990

	Restricted Funds	Unrestricted Fund	Reserve Fund	Total 1990	Total 1989
Revenue:					
Donations	$1,063,347	$ 733,367	$ —	$1,796,714	$2,036,080
Interest	41,489	583,736	—	625,225	534,593
	1,104,836	**1,317,103**	**—**	**2,421,939**	**2,570,673**
Expenditure:					
Patient services	58,452	16,747	—	75,199	98,649
Construction grants – Project Alpha	485,450	—	—	485,450	1,200,000
Fund raising costs, Project Alpha	71,803	—	—	71,803	116,011
Education and travel	1,000	183,718	—	184,718	282,399
Equipment, Project Alpha	594,875	—	—	594,875	—
Equipment, other	15,630	76,492	—	92,122	202,125
Administration	—	123,951	—	123,951	107,360
Research	—	157,978	—	157,978	97,378
Public awareness	—	19,390	—	19,390	41,177
	1,227,210	**578,276**	**—**	**1,805,486**	**2,145,099**
Surplus (deficit) for the year	(122,374)	738,827	—	616,453	425,574
Fund balances at beginning of year	97,457	1,047,059	532,350	1,676,866	1,251,292
Transfers between funds	259,038	(436,488)	177,450	—	—
Fund balances at end of year	**$ 234,121**	**$1,349,398**	**$709,800**	**$2,293,319**	**$1,676,866**

Donors

Thank you, Donors.
The Alberta Cancer Foundation is grateful to all Albertans and others who supported the work we do. Listed below are donors who gave $1000 or more during 1989/90.

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50,000.00 +
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